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POORER THAN THEIR PARENTS? FLAT OR FALLING INCOMES IN ADVANCED ECONOMIES

JULY 2016

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POORER THAN THEIR PARENTS? FLAT OR FALLING INCOMES IN ADVANCED ECONOMIES

JULY 2016

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IN BRIEF

POORER THAN THEIR PARENTS? FLAT OR FALLING INCOMES IN ADVANCED ECONOMIES

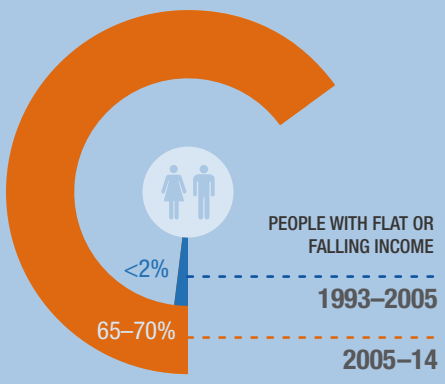
The debate over rising inequality in advanced economies has focused on income and wealth gains going disproportionately to top earners. In this research, we look at an aspect that has received less attention: households in developed economies whose incomes have not advanced when compared to their peers in the past. Examining this issue in three separate ways, we found a very substantial increase in the number of such households.

- Between 65 and 70 percent of households in 25 advanced economies, the equivalent of 540 million to 580 million people, were in segments of the income distribution whose real market incomes—their wages and income from capital—were flat or had fallen in 2014 compared with 2005. This compared with less than 2 percent, or fewer than ten million people, who experienced this phenomenon between 1993 and 2005. Government transfers and lower tax rates reduced the effect on disposable incomes: 20 to 25 percent of households were in segments of the income distribution whose disposable income was flat or down between 2005 and 2014, compared with less than 2 percent in 1993–2005.
- Today's younger generation is at risk of ending up poorer than their parents. Most population segments experienced flat or falling incomes in the 2002–12 decade but young, less-educated workers were hardest hit, according to our second analysis, which segmented income from France, Italy, and the United States by age and educational attainment. Today's younger generation is at risk of ending up poorer than their parents. The third way we looked at this issue was through a 2015 survey of British, French, and US citizens. It largely confirmed that perceptions were in line with the segment analysis. Almost two in five respondents felt their economic positions had deteriorated.
- Government policy and labor-market practices helped determine the extent of flat or falling incomes. In Sweden, for example, where the government intervened to preserve jobs, market incomes fell or were flat for only 20 percent, while disposable income advanced for almost everyone. In the United States, government taxes and transfers turned a decline in market incomes for 81 percent of income segments into an increase in disposable income for nearly all households.
- Flat or falling incomes for the majority of the population could reduce demand growth and increase the need for social spending. Social consequences are also possible; in our survey, nearly a third of those who felt they were not advancing thought that their children and the next generation would also advance more slowly in the future, and they expressed negative opinions about trade and immigration.
- The deep recession and slow recovery after the 2008 financial crisis were primary causes of this phenomenon, but labor-market shifts such as the falling wage share of GDP and long-term demographic trends of aging and shrinking household size also played a role. Before the recession, GDP growth contributed about 18 percentage points to median household income growth, on average, in the United States and Europe. In the seven years after the recession, that contribution fell to four percentage points, and even these gains were eroded by labor-market and demographic shifts.
- Longer-run demographic and labor trends will continue to weigh on income advancement. Even if economies resume their historical high-growth trajectory, we project that 30 to 40 percent of income segments may not experience market income gains in the next decade if labor-market shifts such as workplace automation accelerate. If the slow-growth conditions of 2005–12 persist, as much as 70 to 80 percent of income segments in advanced economies may experience flat or falling market incomes to 2025.
- Policy makers and business leaders both have a role to play in shaping the discussion and helping create solutions. We detail options to boost productivity, GDP growth, and employment; enable workers to find better-paying work; and support disposable incomes of middle- and low-income households.

FLAT OR FALLING

a new look at **INCOME INEQUALITY**

The population with **flat or falling incomes has surged** in advanced economies



65–70%

of households in advanced economies, on average, were in income segments whose incomes in 2014 were flat or down compared with 2005.[1]

MARKET INCOME

<10 MILLION
540M–580M

DISPOSABLE INCOME

<10 MILLION
170M–210M

Although the **global recession** was the most important factor, median household incomes were also affected by **long-run trends.**

AGGREGATE DEMAND
Slow or negative growth in output and employment

DEMOGRAPHIC CHANGES
Smaller households with fewer working-age adults

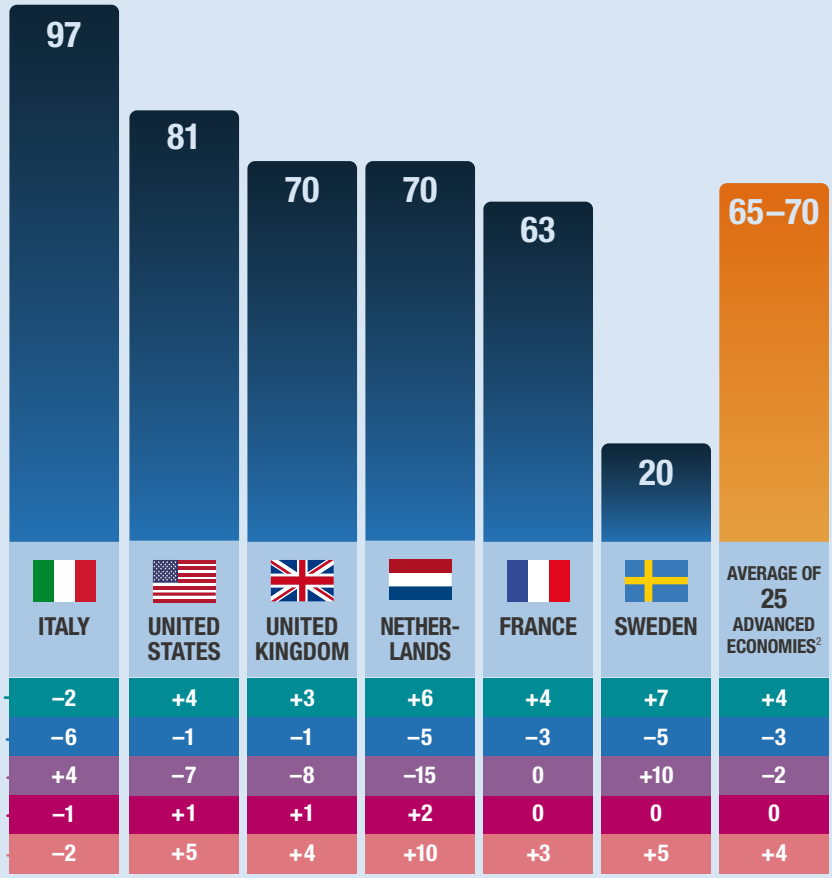
LABOR-MARKET SHIFTS
Lower share of GDP flowing to wages; weak demand for low- and medium-skill labor

CAPITAL INCOME
Lower investment returns and business income

TAXES AND TRANSFERS
Reduced taxes and increased transfers offset some of the losses in market income

Both the extent of flat or falling incomes and the forces driving the phenomenon **vary considerably among countries.**

% of population in groups with flat or falling market income, 2005–14[1]



IMPACT OF THESE FACTORS *Percentage points of change in disposable income, 2005–14*	ITALY	UNITED STATES	UNITED KINGDOM	NETHER-LANDS	FRANCE	SWEDEN	AVERAGE OF 25 ADVANCED ECONOMIES[2]
	–2	+4	+3	+6	+4	+7	+4
	–6	–1	–1	–5	–3	–5	–3
	+4	–7	–8	–15	0	+10	–2
	–1	+1	+1	+2	0	0	0
	–2	+5	+4	+10	+3	+5	+4

In a worst-case scenario, **70–80% of income groups** might not advance in the coming decade

WHAT CAN BE DONE?

ENABLE BUSINESSES TO GROW AND CREATE JOBS
Remove barriers to competition; enable private and public investment; encourage innovation

INCREASE OPPORTUNITIES TO IMPROVE EARNING POTENTIAL
Improve quality and job relevance of education; support labor mobility; raise labor participation

SECURE INCOMES
Adjust taxes, transfers, and labor policies; encourage business initiatives in profit-sharing and employee benefits

[1] 2014 or latest available data for market income (wages and income from capital); population measured in income deciles.
[2] Population-weighted average.
SOURCE: McKinsey Global Institute analysis

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EXECUTIVE SUMMARY

Most people growing up in advanced economies since World War II have been able to assume that they and their children will be better off than their parents and grandparents—and for most of the time, that assumption has been correct. Over the past 70 years, except for a brief hiatus in the 1970s, buoyant economic and employment growth has meant that all households, especially those of the baby boomer generation, experienced rising incomes, both before and after paying taxes and receiving government transfers such as unemployment or social security benefits.

65–70%
Households in income groups with flat or falling market incomes in 2005–14

That positive income trend came to an abrupt halt in the past decade. Our research shows that in 2014, between 65 and 70 percent of households in 25 advanced economies were in income segments whose real market incomes—from wages and capital—were flat or below where they had been in 2005.[1] This does not mean that individual households' wages necessarily went down but that households earned the same as or less than similar households had earned in 2005 on average. In the 12 preceding years, between 1993 and 2005, this flat or falling phenomenon was rare, with less than 2 percent of households not advancing. In absolute numbers, while fewer than ten million people were affected in the 1993–2005 period, that figure exploded to between 540 milllion and 580 million people in 2005–14. Taxes and transfers helped soften the blow, but disposable incomes were nonetheless flat or down in 20 to 25 percent of income segments on average.

The severe recession that followed the 2008 financial crisis and the slow-growth recovery since are a fundamental cause of this phenomenon, but we find that deep-rooted demographic and labor-market factors also played a role—and will likely continue doing so, even if economic growth accelerates. These factors include shrinking households, a smaller share of GDP going to wages, and increased automation in the workplace. Even in the 2005–14 period, market incomes in most of the countries we studied would have risen slightly had it not been for such changes. In this report, we detail the extent of the "flat or falling" phenomenon and the underlying factors, and outline some options for dealing with what is potentially a corrosive social and economic development.

THE GROWING PHENOMENON OF FLAT OR FALLING INCOMES IN ADVANCED ECONOMIES

There are several ways of thinking about income inequality and its implications. The most commonly used approach in recent years has been to look at the rising gap between the wealthiest segments of the population and those in the middle or lower end of the scale. This, for example, has been a focus of French economist Thomas Piketty, whose best-selling 2014 book about the concentration of wealth going to top earners sparked broad public discussion.[2] Another frequently used approach to inequality is to focus on the

1 The 25 advanced economies are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Slovenia, Spain, Sweden, Switzerland, the United Kingdom, and the United States. The choice of these countries was determined by our methodology, as outlined in the technical appendix.

2 Thomas Piketty, *Capital in the twenty-first century*, Belknap Press, 2014. Other works that have examined this aspect include Philippe Aghion et al., *Innovation and top income inequality*, CEPR discussion paper number 10659, June 2015; Anthony Atkinson, *Inequality: What can be done?* Harvard University Press, 2015; David Autor, "Skills, education, and the rise of earnings inequality among the 'other 99 percent,'" *Science*, volume 344, issue 6186, May 2014; François Bourguignon, *The globalization of inequality*, Princeton University Press, 2015; Brian Keeley, *Income inequality: The gap between rich and poor,* OECD, December 2015; Branko Milanovic, *Global inequality: A new approach for the age of globalization*, Harvard University Press, 2016; José Gabriel Palma, "Homogeneous middles vs. heterogeneous tails, and the end of the 'Inverted-U': The share of the rich is what it's all about," *Development and Change*, volume 42, number 1, January 2011; Joseph E. Stiglitz, *The price of inequality: How today's divided society endangers our future*, W. W. Norton, 2012.

poor, those with insufficient income to provide for their basic needs, often calculated as a percentage of the median income.

Our research looks at a third aspect, which has not been as widely studied or documented: the very rapid growth in the proportion of income segments in advanced economies whose earnings both before and after taxes and transfers have been flat or falling. This goes beyond the degree of inequality measured in the standard Gini index by providing a detailed view of the trajectory of all income segments, which can be lost in a consolidated index. We focus on income rather than on wealth or consumption, and we also look at the evolution of incomes over time, rather than at a fixed point.

In our research, we used three approaches to size this flat or falling phenomenon. The first analyzed changes by income segments, or households divided into deciles (tenths), quintiles (fifths), and even percentiles (one-hundredths) depending on where they rank in the national income distribution.[3] We examined income segments in six advanced economies (France, Italy, the Netherlands, Sweden, the United Kingdom, and the United States) to determine how they have fared over the past two decades.[4] We then scaled up the findings to include 19 other advanced economies with similar growth rates and income distribution patterns, for a total of 25 countries with a combined population of about 800 million that account for just over 50 percent of global GDP.[5] Our second approach was an analysis of a detailed data set for 350,000 people in the three countries with microdata available—France, Italy, and the United States. For these countries we examined income by age bracket and educational attainment. Finally, we sought to understand perceptions through conducting detailed surveys of more than 6,000 people in France, the United Kingdom, and the United States that tested how people felt about the evolution of their income.

We did not conduct a longitudinal study to examine intergenerational changes in income level or social mobility. The numbers of people or households that we report are thus based on income or population segments rather than on individuals. Nonetheless, the overall trend is striking, given the hundreds of millions of people in segments with flat or falling income. Full details of our methodology are to be found in the technical appendix at the end of this report.

A total of 65 to 70 percent of income segments in advanced economies experienced flat or falling market incomes in 2005–14

Since 2005, household incomes across advanced economies have stagnated or fallen for most income segments. This is based on an analysis of income segment data from national agencies in the six countries we looked at in detail, a total of 487,000 households. On average, 65 to 70 percent of the population were in income deciles (10-percent slices of the population) whose real market incomes in 2014 fell compared with 2005.[6] In our six focus countries alone, more than 400 million people were in income segments with flat or falling market incomes. When scaled up to the 25 countries in our sample, this translates into

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3 In this report, "high-income" households refers to those in the top two deciles, or top quintile, of income distribution, and "middle-income" segments refers to the fifth and sixth deciles, or third quintile, of income distribution. Where we refer to "low- and middle-income" households, we mean people in deciles one through six, or the first three quintiles, that is to say, the bottom 60 percent of households in income distribution.

4 Our choice of countries was determined by the public availability of detailed data.

5 We do not include other advanced economies such as Japan and South Korea, primarily because of the lack of available comparative data. Our main scaling methodology is to group all countries into six categories, based on similarities in GDP growth rates and shifts in income inequality between the two periods, which we measure using Gini coefficients. Throughout this report, we use real, or inflation adjusted, figures for incomes. We use the OECD consumer price index numbers across all deciles to gauge inflation. For further details see the technical appendix.

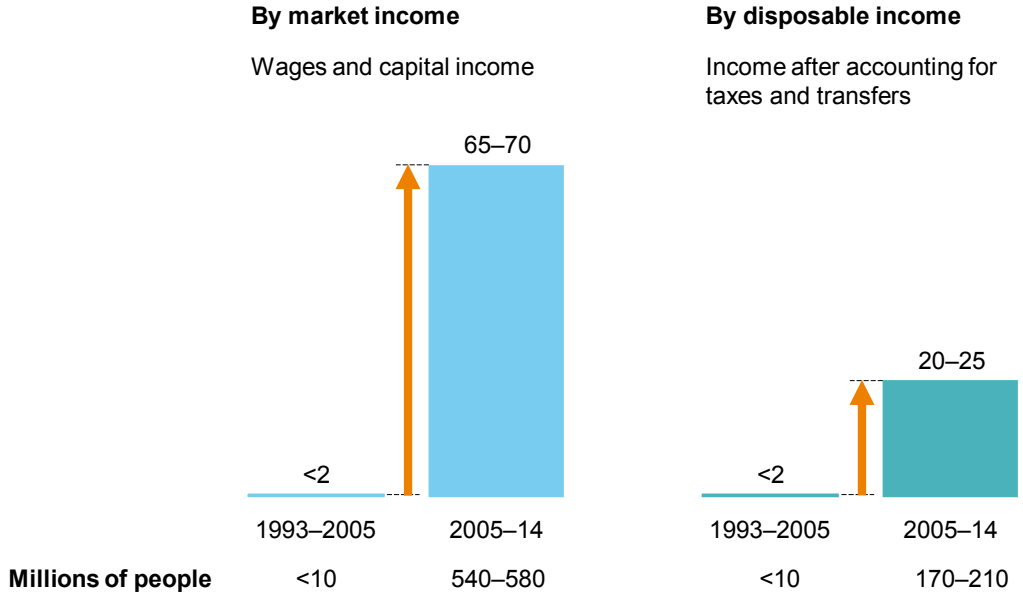
6 End dates for our income segment analysis are dependent on the most recent data available for each country: France (2012), Italy (2012), the Netherlands (2014), Sweden (2013), the United Kingdom (2014), and the United States (2013). For the sake of convenience we describe the two periods in this report as 1993–2005 and 2005–14. To account for the different end dates among countries and make the data comparable, we have standardized the time frame for all.

540 million to 580 million people. By comparison, in the 12 previous years, between 1993 and 2005, less than 2 percent of the population, or fewer than ten million people, were in income segments whose average market incomes were flat or down (Exhibit E1).

Exhibit E1

The percentage of households in income segments with flat or falling incomes exploded in the past decade

Share of households with flat or falling incomes[1]
%



1 Population-weighted average of 25 countries extrapolated from six country deep dives; for each country we use the latest year the data are available—France (2012), Italy (2012 market incomes, 2014 disposable incomes), the Netherlands (2014), Sweden (2013), United Kingdom (2014), and United States (2013). The base year for France is 1996 and for Sweden is 1995.

SOURCE: McKinsey Global Institute analysis

The impact was smaller when measured in disposable income. But even after accounting for higher net transfers to households because of the recession, disposable incomes on average were flat or down in 20 to 25 percent of income segments.

The distribution of flat or falling incomes varies across the six economies we studied in depth. At one extreme is Italy, which experienced a severe economic contraction in the recession after the 2008 financial crisis and has had a very weak recovery since. There, real market incomes were flat or falling for virtually the entire population. At the other extreme is Sweden, where only 20 percent of the population had flat or falling market incomes. In each of the four other focus countries—France, the Netherlands, the United Kingdom, and the United States—the proportion of segments whose market incomes did not advance was in the 60 to 80 percent range.

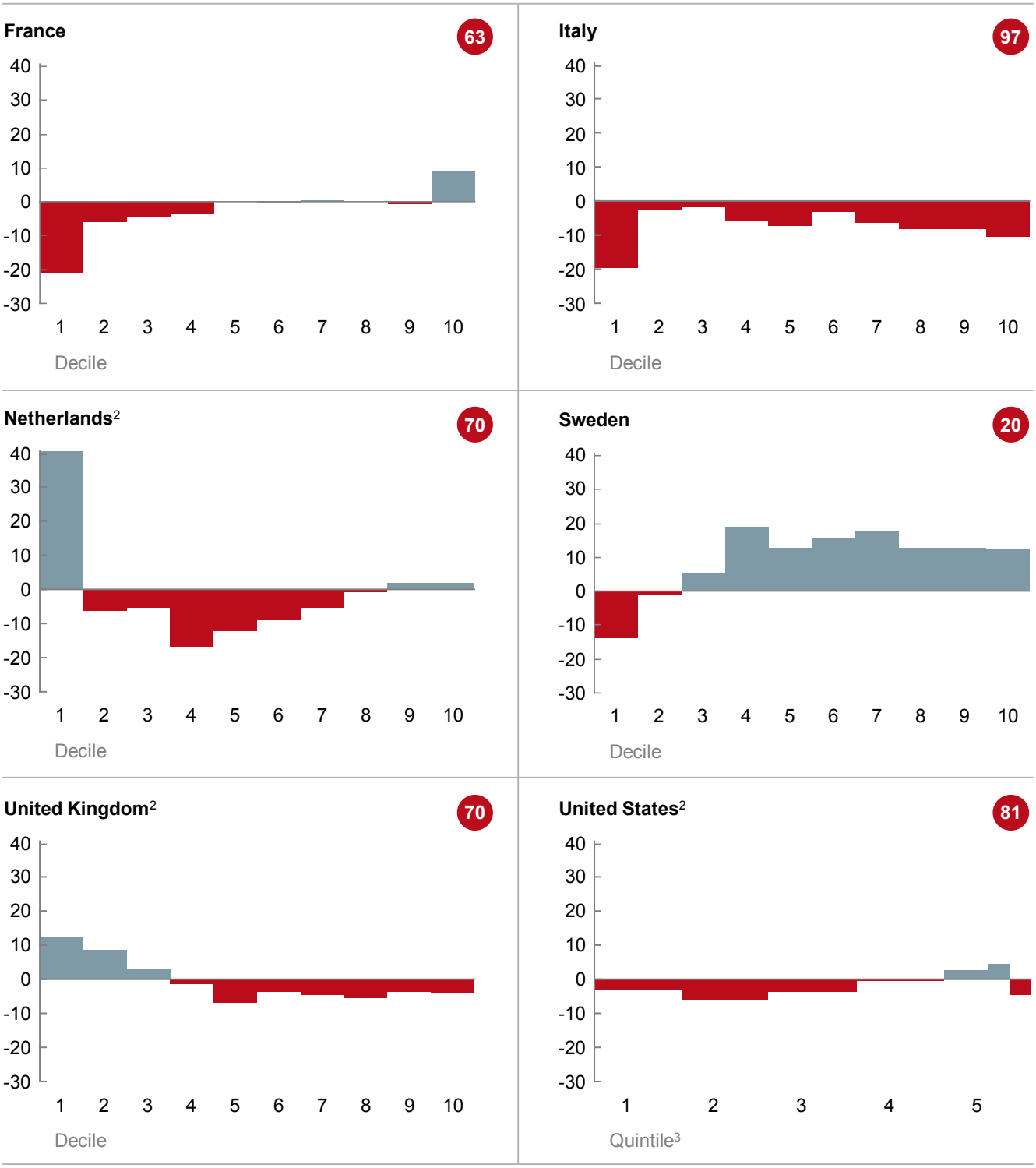
The variation was greater at the level of disposable income. The share of income segments whose disposable income did not advance between 2005 and 2014 ranged from 100 percent in Italy to 10 percent in France and less than 2 percent in Sweden and the United States. These variations reflect differences in policy approaches; labor institutions such as the strength of unions and their role, or services for the unemployed; and widely varying national economic, fiscal, and monetary policy responses to the recession. Exhibit E2 shows how income segments in each of our six focus countries fared during the 2005–14 period.

Exhibit E2

How income groups in our six focus countries fared before taxes and transfers

Real household market income change, 2005–14[1]
%

Rising market income
Falling market income
% of households with falling market income



1 Growth numbers are standardized to make both periods comparable for all countries. For each country we use the latest year the data are available—France (2012), Italy (2012), the Netherlands (2014), Sweden (2013), United Kingdom (2014), and United States (2013).
2 Data show that the increase in the bottom decile incomes in the Netherlands is driven by increase in self-employment income, while in the United Kingdom, the bottom three deciles saw gains in both self-employment and wage income. In the United States, the decrease in the incomes of the top 5% is driven by a decrease in capital income for the top 1% from 2005 to 2013 based on available CBO data.
3 US income is available only in quintiles except for the top quintile which is broken up into the 81st to 90th, 91st to 95th, 95th to 99th and top 1 percentiles.

SOURCE: Institut national de la statistique et des études économiques (INSEE); Bank of Italy; Centraal Bureau voor de Statistiek (CBS); Statistics Sweden; UK Office for National Statistics (ONS); US Congressional Budget Office (CBO); McKinsey Global Institute analysis

Analysis by demographic segments highlights the disproportionate impact on the young and less educated

The trend of flat or falling incomes was confirmed by our second analysis of age- and education-based population segments. The data on 350,000 individuals from France, Italy, and the United States that we used tracked incomes of demographic segments based on three age brackets (younger than 30, 30–45, and older than 45) and three levels of educational attainment—low, medium, and high, based on whether a person received less than a high school diploma, a high school diploma, or a bachelor's degree or above.

20x
as many single mothers in the United States were in the lowest-income households as in the highest-income ones

This second set of data confirmed our sizing results from the first analysis by income segments. We found that income from wages fell for all population segments between 2002 and 2012, regardless of age or level of education.

In all three countries, less-educated workers, and especially younger ones, have been most affected. Moreover, the recession and weak recovery in some of the countries have led to persistently high levels of youth unemployment, preventing young people across advanced economies from launching careers. These are the people who are literally at risk of growing up poorer than their parents.

Women are also overrepresented in lower income deciles. Single mothers were more likely to be in segments that were not advancing, although there is a variance among countries. In the United States, 20 times as many single mothers were in the lowest-income decile as in the highest. In Italy, there were eight times as many single mothers in the lowest income households as in the highest-income households. For France this number was 11 times. Our microdata for the United States show that single-mother households not only earn less than the average household, but their real household income also declined nearly one percentage point faster than all other households in the decade from 2003 to 2013.

Our survey of citizen sentiment in three countries confirmed widespread concerns about current and future income trends

The citizen surveys we conducted in 2015 in France, the United Kingdom, and the United States show that perceptions are in line with the findings of our analysis of income and population segments. We sought to gauge whether people perceived a decline in their income. We asked them to respond to statements about their financial position today, whether it had improved, and how it compared with that of friends and neighbors. We also asked about the future, what they expected their financial position to be in five years' time, and whether they thought they were worse or better off than their parents at the same age.

The answers varied by country but overall there was an even split, with 30 to 40 percent saying their incomes were not advancing, and the same proportion saying their incomes had advanced. The remaining 20 to 30 percent were neutral and did not feel strongly either way about their incomes. The 30 to 40 percent who felt they were not advancing held more pessimistic views about their futures and the futures of their children than those who felt they were advancing. Nearly half of those not advancing expected not to advance in the future, compared with just one-quarter of those who felt they were advancing. Those who felt they were not advancing fell into one of two camps: the two-thirds who believed that things would improve for their children and the next generation, and the remaining one-third who saw slow income growth as a persistent problem that would continue to affect their children. As we shall see, expectations of future income advancement often colored people's views of the world.

The flat or falling phenomenon could have corrosive economic and social implications

Over time, declining earning power for large swaths of the population could limit demand growth in economies and increase the need for social spending and transfer payments, even as tax receipts from workers with stagnating incomes limit capacity to fund such programs.[7] The impact could be more than purely economic, however, if the disconnect between GDP growth and income growth persists.

The impact of flat or falling incomes could be more than purely economic if the disconnect between GDP growth and income growth persists.

30–40%
of survey respondents said their incomes were not advancing

The survey provided an indication of the potentially corrosive social and economic consequences of flat or falling incomes. Along with questions about income trends, we asked about people's views on trade and immigration. The citizens who held the most negative views on both were the same group who felt their incomes were not advancing and did not expect the situation to improve for the next generation. More than half of this group agreed with the statement, "The influx of foreign goods and services is leading to domestic job losses," compared with 29 percent of those who were advancing or neutral. They were also twice as likely to agree with the statement, "Legal immigrants are ruining the culture and cohesiveness in our society," compared to those advancing or neutral. Our survey also found that those who were not advancing and not hopeful about the future were more likely than those who were advancing to support nationalist political parties such as France's National Front or, in the United Kingdom, to support the move to leave the European Union.

WHY INCOMES STOPPED RISING

The recession that followed the 2008 financial crisis was one of the deepest and longest-lasting downturns of the post-World War II era, and the recovery that followed it has been unusually sluggish in many advanced economies, especially in Western Europe. The downturn was the single biggest factor affecting incomes in the 2005–14 period. However, it was not the only cause. Longer-term demographic and labor-market developments in each of the countries we examined also played a role in the flat or falling income trend and will continue to do so.

To understand how these different forces played out, we analyzed the patterns of median market and median disposable incomes for two periods: 1993 to 2005 and 2005 to 2014.[8] We focus on income changes of the median income household because middle-income households are representative of the overall flat or falling income trend in most countries, with the singular exception of Sweden.

[7] Wealthier households have a lower marginal propensity to consume. For a discussion of this phenomenon and its effect on growth, see *A window of opportunity for Europe*, McKinsey Global Institute, June 2015.

[8] In our analyses of factors causing flat or falling incomes, we standardize the growth rate from 1993 to 2005 and 2005 to 2014 in order to make them comparable. For details, see the technical appendix.

Five factors underlie the changes in median incomes that we observe in our focus countries:

- **Aggregate demand factors.** When aggregate demand (or GDP) grows, employment, and labor-force participation also increase, enabling incomes to rise. Conversely, lower labor-force participation rates, rising unemployment, and waning productivity (output per worker) can all lead to stagnating or falling incomes. Unemployment in particular can have a dampening effect on household income.

- **Demographic factors.** These capture changes in the number of working-age people in each household. This number has fallen in several of our focus countries because of the shrinking size of households, the result of changing family structures and lower fertility rates, and aging, which decreases the number of people available to work.

- **Labor-market factors.** These include the evolving pattern in labor demand and supply. This is manifested in the wage share of GDP and the median household's share of wages. Among the forces that can explain movements in these two factors are income gains for high-skill workers and negligible income gains or declines for low- and medium-skill workers, and the share of part-time and temporary work, which is often less well paid proportionately than permanent or full-time work. Labor-market factors can vary depending on the role and influence of unions, different national labor regulations and practices, trade and immigration, and the degree to which jobs are affected by automation.

- **Capital income factors.** These include capital gains from asset sales, interest and dividends from investments, rental income, income from business, or income received from private pension plans.

- **Tax and transfer factors.** Transfers include a range of cash payments to beneficiaries such as social security payments, disability or workers' compensation, and unemployment benefits.[9]

The first three of these categories—aggregate demand, demographic, and labor-market factors—contribute to changes in labor income. Changes in market income are driven by changes in this labor income, together with changes in capital income. Disposable income is the amount households receive after taxes, and transfers are applied to market income. Exhibit E3 shows how each of these factors played a role in the 2005–14 period, and the difference with the previous 1993 to 2005 period, by country.

Let us now explore each of these in turn.

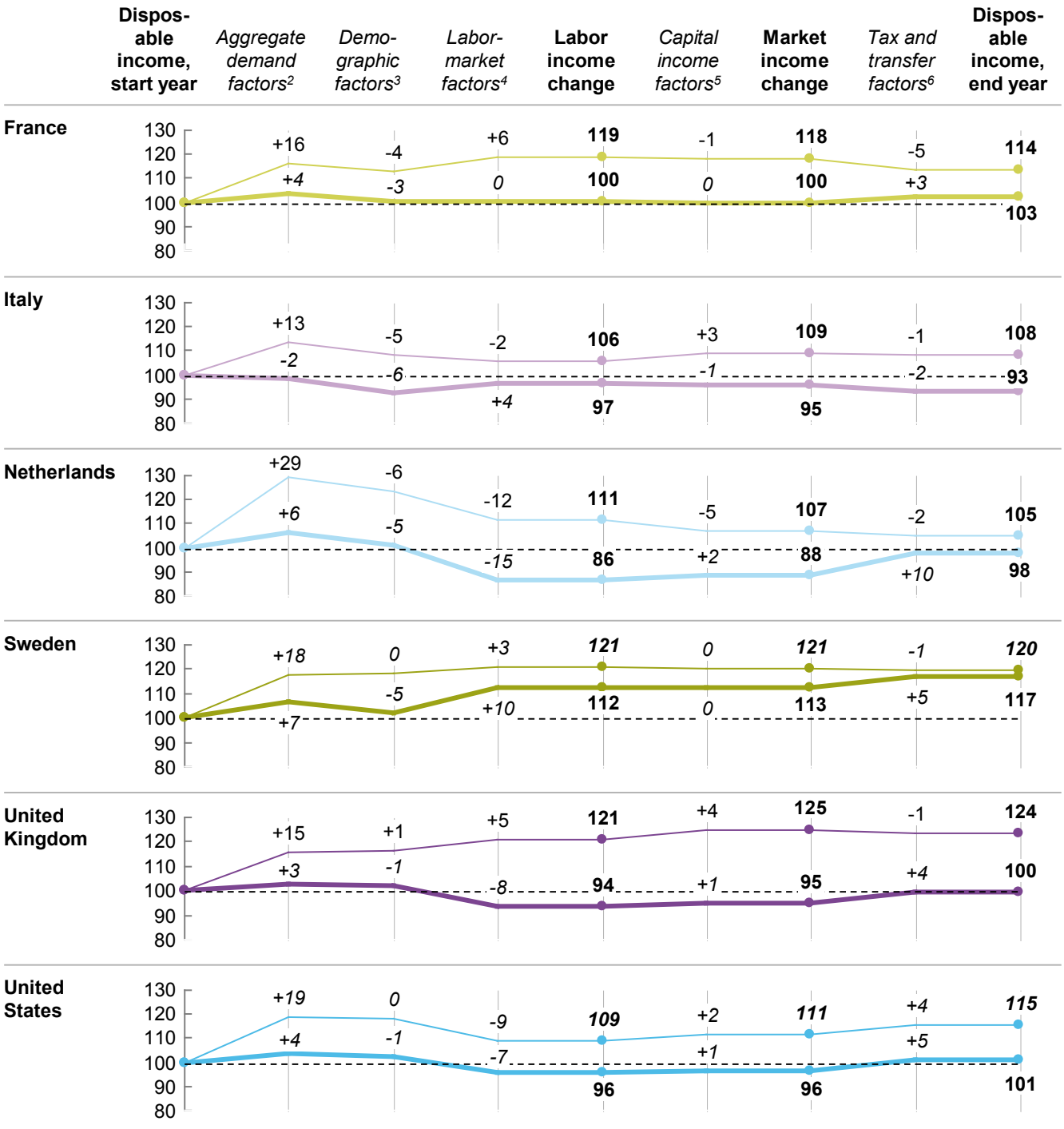
[9] In-kind transfers such as the Supplemental Nutrition Assistance Program, Medicare, and Medicaid are counted for the United States but not for the other five countries due to lack of data on in-kind transfers by decile.

Exhibit E3

Five factors determine changes in disposable income

Change in disposable income for middle-income households, 1993–2005 and 2005–14[1]
%

1993–2005
2005–14
Bold text = Total
Italic text = Change



1 Middle-income, or median, households are households in the middle (3rd) quintile or the 5th and 6th decile or the 40th to the 59th percentile. For each country we use the latest data available—France (2012), Italy (2012), the Netherlands (2014), Sweden (2013), United Kingdom (2014), and United States (2013). The base year for France is 1996 and for Sweden is 1995. All growth numbers are standardized to make results comparable.
2 Change in aggregate output, measured by output per employed worker, multiplied by change in number of employed workers in the working-age population.
3 Change in number of working-age people per household.
4 Change in wage share of GDP, adjusted for difference between consumer price inflation and inflation of overall output, and median household share of wages.
5 Includes profit from own business, income from capital, and other sources of market incomes that cannot be classified as income from labor.
6 Includes income from private and public pension transfers, other transfers such as social security benefits, and taxes on labor income and capital income.
NOTE: Numbers may not sum due to rounding.

SOURCE: INSEE; Bank of Italy; CBS; Statistics Sweden; ONS; CBO; McKinsey Global Institute analysis

The recession and subsequent slow recovery sharply reduced the effect of aggregate demand on market incomes

After the global financial crisis in 2008, GDP contracted in each of the economies we studied in depth, raising unemployment rates sharply and reducing median incomes. Labor productivity growth, which was already slowing in the 2000–07 period, has slowed even further since the crisis. In the 12-year period before the recession that is our baseline (1993 to 2005), growth in aggregate demand contributed 19 percentage points to median disposable income growth in the United States and 17 points, on average, in the five European countries we focused on. In 2005 to 2014, which included the recession and its aftermath, that figure plunged to just four percentage points in the United States and in Europe.

On average, **18** percentage points of growth in median disposable incomes in 1993–2005 came from aggregate demand

The recession in the United States was severe but relatively short-lived: GDP dropped by 3.4 percent from peak to trough from 2008 to 2009, and growth was negative for five quarters, ending in late 2009. Unemployment doubled from less than 5 percent to nearly 10 percent between 2007 and 2010. Europe overall suffered a "double-dip" recession, when growth stalled in 2012 during the Eurozone's sovereign debt crisis. Italy suffered a "quadruple-dip" recession with growth stalled or falling almost continuously from 2007 through 2015; over that period, GDP contracted by 12.2 percent. Unemployment rates in Europe rose at an accelerated pace after the second dip, doubling from less than 4 percent in the Netherlands in 2008 to nearly 8 percent in 2014. In France, unemployment reached its highest level since the crisis—10.8 percent—in the third quarter of 2015. Italy's unemployment rate peaked at 12.9 percent in the third quarter of 2014.

The recovery has been slow and uneven across countries. At the end of 2015, seven years after the recession began, per capita GDP had not returned to pre-recession levels in Italy and the Netherlands, though it had recovered in the other four countries. The US economy has recovered faster than the other five, with GDP per capita rising 1.3 percent per year between 2009 and 2015. This compares with 0.9 percent across the European Union (EU). However, even as US GDP per capita growth rebounded and the US unemployment rate returned to the pre-crisis level in 2015, median market incomes remained flat between 2011 and 2014. The United Kingdom suffered a double-dip recession, but employment has returned to the pre-recession level.

Slow productivity growth in turn has raised questions about the link between productivity and inequality.[10] While the largest change from the 1993–2005 period was the lower levels of aggregate demand growth, that alone was not enough to depress incomes and determine which income segments bore the pain to a greater or lesser degree.[11] Indeed, aggregate growth remained positive for all countries except Italy, and yet most income segments had flat or falling incomes. That was because two other long-run factors also weighed heavily on income advancement.

Long-term demographic factors are limiting growth in household income, especially in Europe

The shrinking household size and the decline in the number of working-age adults per household affect income in two ways: by reducing the pool of income that is earned by household members, and by limiting the economies of scale that can be gained from sharing resources.

Households are shrinking as a result of changing family structures and lower fertility rates, and the number of working-age adults per household is also changing, in part because of aging. These two long-run demographic factors have had a significant influence on

[10] See, for example, *The productivity-inclusiveness nexus*, OECD, June 2016.
[11] Ibid.

household incomes in the past two decades, especially in Europe, and will continue to do so. The number of working-age adults per household fell in both the 1993–2005 and 2005–14 periods across the five European economies we analyzed, reducing income by the equivalent of four percentage points in both periods. The drop in household size was greatest in Italy, where there were 21 fewer working-age people per hundred households in 2012 than in 2002.[12] In the United States, by comparison, the number of working-age people per hundred households dropped on average between 2002 and 2012 by just two. However, in the United States, the bottom quintile of households has on average 50 fewer working-age people in every hundred households than the richest quintile.[13]

Labor-market factors have depressed wage growth for middle- and low-skill workers

Two labor-market factors contributed to flat or falling incomes and have been particularly pronounced in the United States, as well as the Netherlands and the United Kingdom.

5%
average decline in wage share as a percentage of GDP in our 6 countries

First is the share of national income that is paid to workers, the so-called wage share.[14] Specifically, we look at wages and salaries paid to workers, rather than all compensation to employees, to remove the effects of non-wage labor costs such as employer pensions and National Insurance contributions in the United Kingdom.[15] From 1970 to 2014, with the exception of a spike during the 1973–74 oil crisis, the average wage share fell by 5 percent on an indexed basis in the six countries we studied in depth, and in the most extreme case, the United Kingdom, by 13 percent. The decline in wage share has taken place despite rising productivity, suggesting a disconnect between productivity and incomes. The wage-share decline is due in part to the growth of corporate profits as a share of national income, as a result of rising capital returns to technology investments, lower returns to labor from increased trade, rising rent incomes from home ownership, and increased depreciation on capital.[16] Indeed, profits for North American and Western European corporations in the past three decades have been exceptional, with after-tax operating profits rising to 9.8 percent of global GDP in 2013 from 7.6 percent in 1980, an increase of nearly 30 percent. Between 2010 and 2014, after-tax profits of US firms measured as a share of national income even exceeded the 10.1 percent level last reached in 1929.[17]

The second factor is the uneven distribution of this wage share among different income segments. Since 1993, households in the uppermost income segments in our six focus countries have on average received a growing share of the total wages, even as the share for low- and middle-income segments has either stagnated or fallen. This is not the case in all

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12 Shrinking household size in a country may not affect per capita income but does lead to falling "equivalized household income," a measure of household income adjusted for the number of dependents. This attempts to account for the economies of scale that come with living in larger households (additional household members receive lower weighting to reflect economies of scale). Needs of households fall with size, but not proportionately, since housing, utilities, and other necessities are not used on a per capita basis; one resident uses the same amount of heat as two, for example. For a detailed discussion of this concept, see *OECD framework for statistics on the distribution of household income, consumption and wealth*, OECD, June 2013.

13 This quintile also had falling market incomes in 2005–14.

14 Other factors that are included in the national income are rent, interest, and profits. In this report, we use GDP as a proxy for gross domestic income due to the negligible statistical discrepancy between the two numbers.

15 In the United Kingdom, unfunded liabilities in defined-benefit pension schemes are creating downward pressure on wages to workers. See Conor D'Arcy and Gavin Kelly, *Securing a pay rise: The path back to shared wage growth*, Resolution Foundation, March 2015, and Brian Bell, *Wage stagnation and the legacy costs of employment*, Centre for Economic Performance, London School of Economics, paper number CEPCP 458, November 2015.

16 While overall spending on capital goods has been weak, there has been considerable investment in information technology, whose prices have declined. See Loukas Karabarbounis and Brent Neiman, *The global decline of the labor share*, NBER working paper number 19136, June 2013; Loukas Karabarbounis and Brent Neiman, *Declining labor shares and the global rise of corporate saving*, NBER working paper number 18154, June 2012; and *How CBO projects income*, Congressional Budget Office (CBO), July 2013.

17 See *Playing to win: The new global competition for corporate profits*, McKinsey Global Institute, September 2015, and *Diminishing returns: Why investors may need to lower their expectations*, McKinsey Global Institute, May 2016.

countries: in France, Italy, and Sweden, for example, the share of upper income households actually declined somewhat in the 2005–14 period. However, in the Netherlands, the United Kingdom, and the United States, upper income households experienced strong wage growth while low-income and middle-income segments fell back sharply.

Changing demand for low- and medium-skill workers, technological advances, and growth of part-time and temporary labor contracts affected wage trends

Some long-run business and economic trends help explain this disparity. In general, demand for low- and medium-skill workers has been lower than for high-skill workers. This has coincided with a push by companies in advanced economies to concentrate spending in their home markets on capital- and knowledge-intensive activities, while lower-wage nations have taken on more labor-intensive activities. Between 1980 and 2010, competition for low- and medium-skill jobs became global. Some 85 million workers in developing economies joined the labor force in export-related activities as global corporations built out their supply chains.[18] This global competition for low-skill labor contributes to polarization of employment and wages in advanced economies, although the net effect on overall employment is unclear.[19]

Between 1980 and 2010, competition for low- and medium-skill jobs became global, with 85 million workers in emerging economies joining the labor force in export-related activities.

Technology has also skewed labor demand. In both manufacturing and services, robots and computers have automated tasks that once required workers, while information technologies have allowed companies to streamline business processes and build new types of organizations that require less but higher-skill labor.

The growth of part-time or temporary contracts has also influenced the share of wages going to low- and middle-income segments. In all six of our focus countries, middle- and low-skill workers have lower employment rates than higher-skill workers, and in almost all countries, low-skill workers are more likely to be engaged on a temporary basis. Exhibit E4 shows how this trend evolved in the five countries analyzed in this report where data was available. Some countries, such as Denmark, Germany, and the Netherlands, have reformed employment regulations to put temporary workers on a more equal footing with permanent workers in terms of job security, pension schemes, and access to training.[20] However, in the United States and some other countries, temporary work does not include benefits such as pensions and paid leave, and it is less likely to provide the experience or training that can help workers secure more highly paid employment.[21]

Flexible work arrangements with part-time hours have advantages, such as helping raise labor participation rates of workers whose domestic responsibilities can make full-time employment impractical. A small but rapidly growing number of workers is also actively

[18] For a further description of the emergence of a global labor force, see *The world at work: Jobs, pay and skills for 3.5 billion people*, McKinsey Global Institute, June 2012.

[19] Gianmarco Ottaviano, "Offshoring and the migration of jobs," *IZA World of Labor*, volume 170, July 2015; David Autor, David Gorn, Gordon H. Hanson, *The China shock: Learning from labor market adjustment to large changes in trade*, NBER working paper number 21906, January 2016.

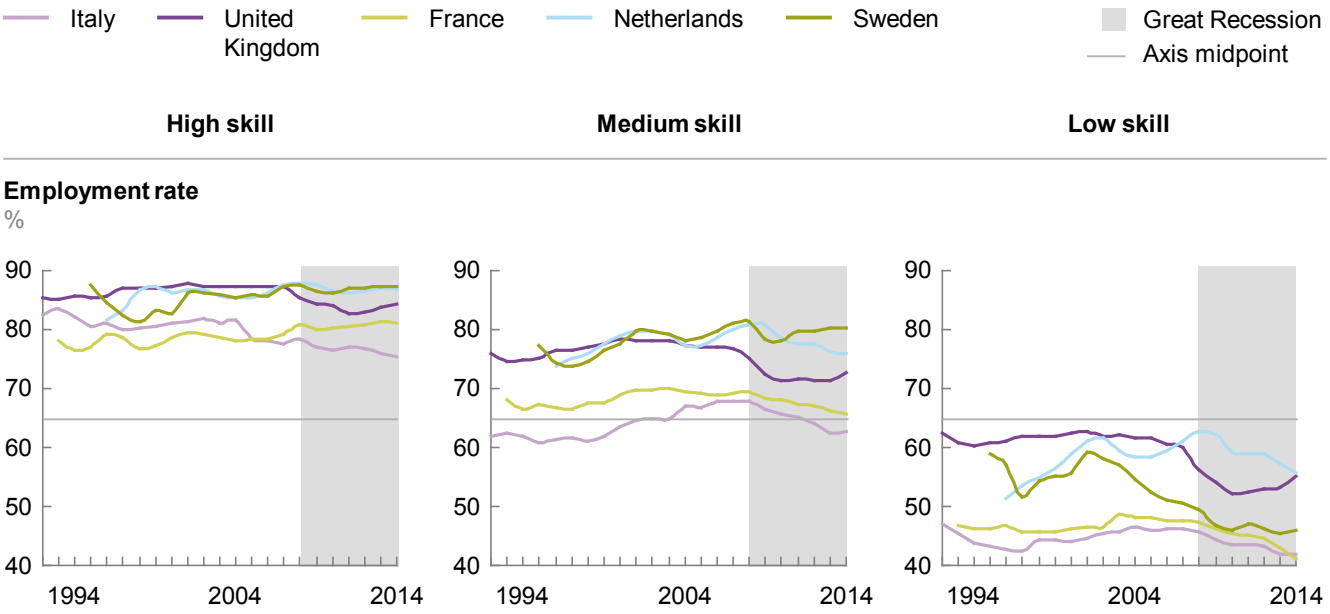
[20] Ton Wilthagen and Frank Tros, "The concept of 'flexicurity': A new approach to regulating employment and labor markets," *Transfer,* volume 10, number 2, 2004.

[21] *OECD employment outlook 2015*, OECD, July 2015.

seeking contingent work on online labor platforms.[22] However, part-time employment provides fewer hours of work per year and for some workers it remains a stopgap measure; the share of workers in our six sample countries who are working part time involuntarily (that is, they sought full-time employment but accepted part-time work) doubled from 3 percent of the labor force in 1993, on average, to more than 6 percent in 2014.[23]

Exhibit E4

Employment has been lower for low- and medium-skill workers, and they are more likely to be employed on temporary contracts



SOURCE: OECD; McKinsey Global Institute analysis

Differences in union rates and labor regulation influenced outcomes for some income and demographic segments

National labor-market institutions and practices that shaped the outcomes in employment and wages appear to have made a difference in some of our focus countries. For example, the United States is known for its relatively light labor regulation and flexible labor markets compared with most European economies. About 11 percent of private-sector workers

[22] See *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015.

[23] OECD labor database.

in the United States are represented by unions, compared with 30 percent, on average, in Europe. During the recession, US companies had greater freedom to cut jobs and implemented permanent labor-cost savings, despite weak demand.[24] In Europe, by contrast, labor-market rigidity may contribute to youth unemployment. For example, in Italy, employers hired fewer young workers in the recession following the 2008 financial crisis in part because of income support schemes for permanent workers. This was compounded by a 2012 pension reform that kept older workers in the workforce.[25]

The declining ability of labor to protect its share of national income, and of middle and lower income segments to protect their share of the wage pool, reduced real median disposable income growth by nine percentage points in the United States in the 1993–2005 period and by seven points in the 2005–14 period, while only two European economies, Italy and the Netherlands, experienced this negative effect in the 1993–2005 period. In the 2005–14 period, however, labor-market effects did not contribute to median disposable income growth in France, and had a negative impact in the Netherlands and the United Kingdom, where union membership has fallen the most steeply in our sample of countries. Italy, which entered the recession in a weak state and has had the greatest prevalence of flat or falling incomes, in 2015 introduced labor-market legislation aimed at simplifying rules and rigidities that have held back employment.

68%
of workers in Sweden are union members

In Sweden, where 68 percent of workers are union members, the median household received a greater share of output that went to wages—and received more of the gains from output growth than households in Sweden's top and bottom income deciles in the 2005–14 period. This reflects Swedish labor policies such as contracts that protect wage rates and hours worked. After the global financial crisis, the Swedish government worked with unions to forge agreements for temporary reductions in work hours, which preserved jobs and helped private-sector employers withstand the downturn.

Capital income factors had a relatively minor effect on median and low-income households

Capital income is derived from a range of investment and business activities including interest, dividends, and realized capital gains from financial-market investments, asset sales, business income, and private pensions. For upper income households, capital income is significantly more important than for other income segments, an issue that has become a focus of other income inequality research, including that of French economist Thomas Piketty.[26] For example, in the six countries we study in depth, in 2014, capital income amounted to 33 percent of disposable income for households in the highest income quintile. That compared with just 7 percent of disposable income for the lowest income quintile, and, for median income households, 14 percent of disposable income.

For our analysis, capital income was not a major factor, as the shift between 2005 and 2014 was very small for median and low-income households. As a percentage of disposable income, for example, the share of capital income in disposable income remained virtually unchanged on average in our six focus countries for the low- and middle-income quintiles in 2005–14. In fact, the largest movement in capital income as a share of disposable income was actually felt by high-income households in the top quintile. For them capital income fell from 35 percent of disposable income in 2005 to 33 percent in 2014.

[24] See *An economy that works: Job creation and America's future*, McKinsey Global Institute, June 2011.
[25] Antoine Bozio et al., "European public finances and the Great Recession: France, Germany, Ireland, Italy, Spain, and the United Kingdom compared," *Fiscal Studies,* volume 36, number 4, December 2015.
[26] Thomas Piketty, *Capital in the twenty-first century*, Belknap Press, 2014.

Tax and transfer policies reduced or even reversed the impact of flat or falling market incomes on disposable income

Taxes and transfers directly affected how declining market incomes translated into disposable income, and in some countries made a significant difference in reducing or even reversing the flat or falling phenomenon for some income groups, including middle-income households. Market incomes for median income segments were flat or falling in all countries except Sweden between 2005 and 2014, but disposable incomes for the median income segment fell in only two of our six focus countries, Italy and the Netherlands, by 2 to 10 percent.

In the United States, net transfers raised median disposable income growth by the equivalent of five percentage points between 2005 and 2014, turning a four-point decline in median market income into a one percentage point gain in disposable income. As part of its stimulus plan, the US government transferred more than $350 billion to households in the form of tax relief and assistance to workers affected by the downturn, including raising unemployment benefits and extending their duration.[27] In France, net transfers on an indexed basis raised median disposable income by three percentage points above median market income, while in the United Kingdom, transfers restored disposable income for median income households to their 2005 level, offsetting the decline in market income.

Central government debt in Italy, the United Kingdom, and the United States is close to

100%

of GDP

In the future, governments may find it difficult to sustain this level of spending without substantial revenue increases; government debt as a share of GDP increased over the past seven years in five of the six countries we studied. For example, central government debt is close to 100 percent of GDP or higher in Italy, the United Kingdom, and the United States. In the United States, it rose from 56 percent of GDP in 2005 to 97 percent of GDP in 2016. Sweden is the outlier with a relatively flat debt share of GDP between 2008 and 2015; while it increased debt levels to fund the effects of recession, it started from a lower level, of less than 40 percent in 2008, which gave it greater freedom to spend during the crisis.[28] In 2015, Sweden's central government debt remained steady at about 42 percent.

In the United States, net transfers in 2005–14 turned a four percentage point decline in median market income into a one-point gain in disposable income.

DIFFERING POLICY RESPONSES AND LABOR PRACTICES LED TO WIDE NATIONAL VARIATIONS IN OUTCOMES FOR INCOME GROUPS IN 2005–14

One of the findings of our research is the wide variation in income growth for different segments of the income distribution in each of our six focus countries, both in the 2005–14 period and in 1993–2005. These differences include the extent to which the pattern of income growth (or decline) for market incomes was transposed into a similar or different pattern for disposable incomes (Exhibit E5). Our findings suggest that at least some of these variations are a consequence of policy. While this study did not set out to map national policy measures to income developments in an exhaustive manner, some features do stand out.

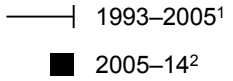
[27] Douglas W. Elmendorf, "Estimated macroeconomic impacts of the American Recovery and Reinvestment Act of 2009," CBO letter to Senator Charles Grassley, March 2, 2009.

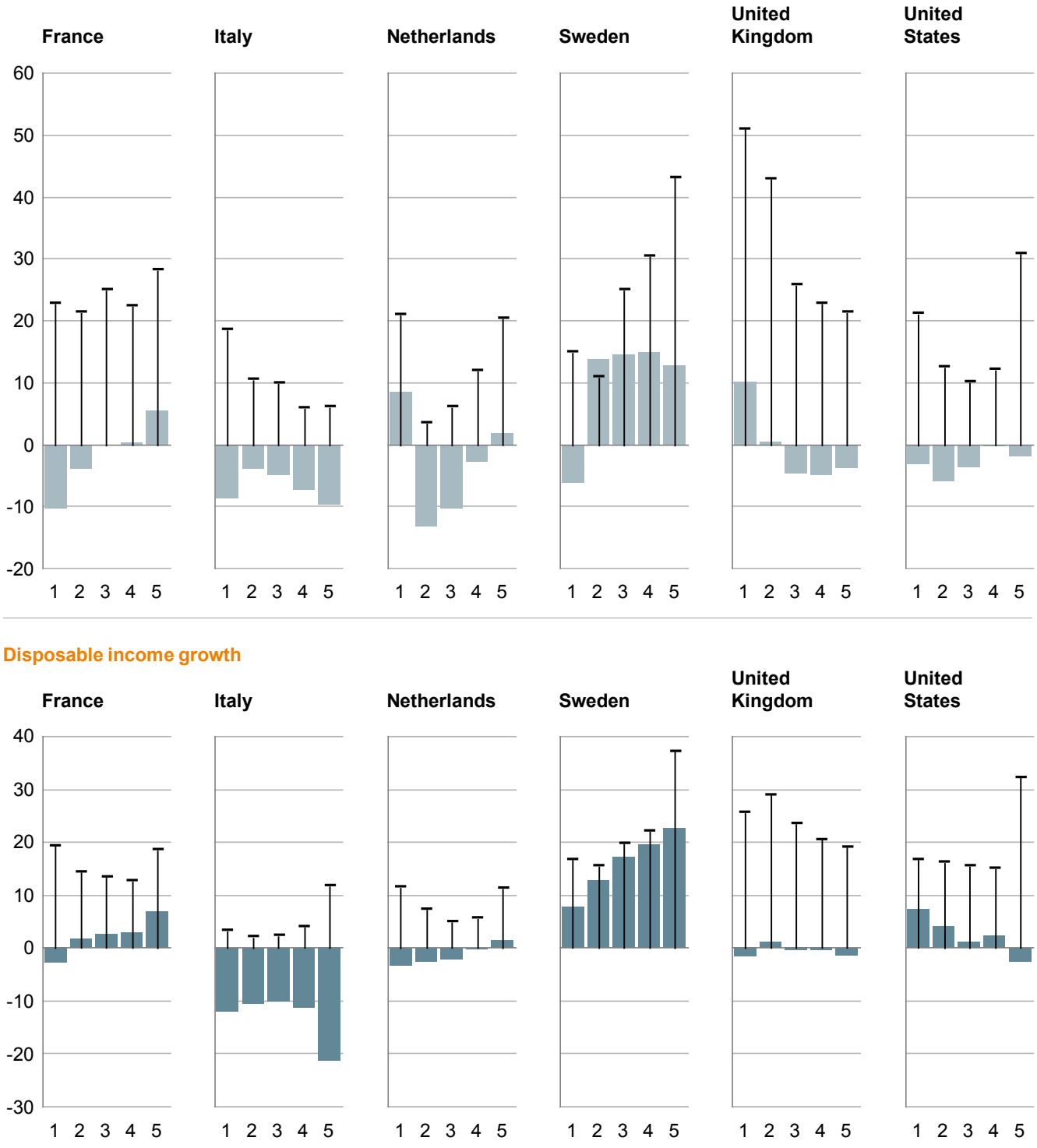
[28] *Debt and (not much) deleveraging*, McKinsey Global Institute, February 2015.

Exhibit E5

Wide variations in market and disposable incomes in the two periods were driven by differing tax and transfer policies across countries

Total growth in income by quintile (%)
Quintiles (1 = bottom, 5 = top)





1 All growth numbers are standardized to make results comparable across all countries and both time periods.
2 For each country we use the latest year the data are available: France, 2012; Italy, 2014 disposable incomes, 2012 market incomes; Netherlands, 2014; Sweden, 2013; United Kingdom, 2014; and United States, 2013.

SOURCE: INSEE; Bank of Italy; CBS; Statistics Sweden; ONS; CBO; McKinsey Global Institute analysis

First, government taxes and transfers can play a decisive role in limiting or reversing the decline of market incomes at the level of disposable incomes. Of our six countries, this was particularly striking in the United States, where a decline in market incomes for 81 percent of all income segments in the 2005–14 period translated into an increase in disposable income for nearly all households. This type of large-scale intervention could be unsustainable, however, given already high debt levels and the effect on budget deficits. Government intervention can also accentuate income declines, as happened in Italy, where austerity measures raised taxes and reduced some benefits, aggravating the drop in market incomes for all quintiles.

Second, the lowest income groups were not always the segment to bear the brunt of flat or falling incomes; in all of our focus countries except Sweden, middle-income segments also felt the impact, as a result of declining income from labor. Higher income segments also experienced a decline in market income in Italy, the United Kingdom, and the United States as a result of lower income from capital, which was especially volatile during and after the 2008 financial crisis. In the United States, higher capital income increased disposable income growth for the top quintile by 24 percentage points from 1993 to 2005, but pushed it down by six points from 2005 to 2014.

Looking at some countries individually, Sweden stands out as the only one where market incomes rose for middle-income households. Sweden had gone through a previous steep downturn in the 1990s. After 2008, the government focused on job preservation and creation, adding temporary jobs to the public sector, reducing payroll taxes for businesses, and providing tax incentives to hire young people and the long-term unemployed.[29]

In the United Kingdom, the pattern of disposable income from 1993 to 2005 highlights the outcome of the redistributive policies of the government of Tony Blair at the time, with sharp income increases for the lowest quintiles. The British economy is highly reliant on revenue from the financial sector to balance its budgets, and after an initial period of increased spending after the financial crisis, the government imposed a period of austerity when financial revenue fell post-2008. More than four-fifths of the fiscal measures associated with austerity were spending cuts that disproportionately affected working-age people (cuts to benefits and public-sector jobs, for example), although state pensions were protected from the cuts. In our data, this decrease in spending seems to have most affected the bottom quintile from 2005 to 2014, with disposable income growth decreasing by six percentage points because of taxes and transfers.[30]

In France, there was a notable difference in the impact of labor-market factors on different quintiles. These labor-market factors reduced disposable income growth by four percentage points for the lowest quintile, and increased it by two percentage points for the top quintile. This could be a reflection of France's two-tiered labor market, where lower-paying jobs are often temporary and do not provide the same level of benefits or security. Moreover, throughout the financial crisis, the unit cost of workers in France continued rising, and some companies opted to stop hiring and end short-term contracts.[31]

[29] Dominique Anxo and Thomas Ericson, *Labor market measures in Sweden 2008-13: The crisis and beyond,* ILO, February 2016.

[30] Antoine Bozio et al., "European public finances and the Great Recession: France, Germany, Ireland, Italy, Spain, and the United Kingdom compared," *Fiscal Studies*, volume 36, number 4, December 2015.

[31] Mathias André et al., "French public finances through the financial crisis: It's a long way to recovery," *Fiscal Studies*, volume 36 number 4, December 2015.

EVEN A RETURN TO STRONG GDP GROWTH MAY NOT ELIMINATE THE FLAT OR FALLING TREND AS DEMOGRAPHIC AND LABOR FACTORS WEIGH ON INCOMES

All five of the factors we identified earlier as underlying the stagnation or decline in median household incomes since 2005 are likely to affect income growth in the future. We have conducted some sensitivity analyses for income growth over the next decade to 2025, using different hypothetical models for aggregate demand, wage share of GDP, and the impact of automation on labor demand and employment.[32]

The pace of GDP growth in advanced economies is one of the most variable of our five factors and while it will not be the sole determinant of income growth, it will be a major one. As we have seen, the post-2008 global recession and slow recovery had a significant impact on incomes by substantially reducing the aggregate demand component of income growth compared with buoyant growth in the 1993–2005 era, even though aggregate demand factors nonetheless had a positive effect on median household incomes in the 2005–14 period.

The demographic factors—that is to say, the decline in household size and a drop in the number of working-age adults per household—are more predictable, as they are long-run trends resulting from the increased aging of the population, lower fertility rates, and changes in family structures, with more single-parent families. The labor-market factors—the wage share and its uneven distribution among different income segments—will likely continue to be affected by a range of developments, including the growing use of automation in the workplace.

Previous MGI work has laid out evidence that long-term productivity growth has been achievable without job losses, and that technological innovation in the past has created more jobs than it destroyed. In the United States, for example, positive gains in both productivity and employment have occurred in more than two-thirds of the years since 1929.[33] However, the spread of digitization, which increases the automation potential of many sectors of the economy, has also prompted forecasts that this historic link between productivity growth and employment growth could change.[34] MGI has estimated that automation could accelerate displacement of medium-skill jobs to nearly twice the rate of recent decades, with as much as 15 percent of such jobs being affected.[35]

Changes in capital income have not been a significant factor for middle-income households, although they have affected high-income household. However, the potential for reduced returns on stock and bond investments over the next 20 years after a period of exceptional increases from 1985 to 2014 could affect public and private pensions for all income segments.[36] Taxes and transfers will continue to influence disposable income, at a time when many governments' sovereign debt has risen to historic levels and they have not yet begun the process of deleveraging.[37]

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32 We model these scenarios for three countries—France, Italy, and the United States—where we had the microdata to estimate employment and wage outcomes for different types of labor market participants, based on education, age and gender. The consolidated results are based on a simple average of these three economies, which we use as a proxy for outcomes across advanced economies.

33 *Growth and renewal in the United States: Retooling America's economic engine,* McKinsey Global Institute, February 2011.

34 Erik Brynjolfsson and Andrew McAfee, *Race against the machine,* Digital Frontier Press, 2011. For an assessment of automation potential, see Michael Chui, James Manyika, and Mehdi Miremadi, "Four fundamentals of workplace automation," *McKinsey Quarterly*, November 2015.

35 *Digital America: A tale of the haves and the have-mores*, McKinsey Global Institute, December 2015.

36 *Diminishing returns: Why investors may need to lower their expectations*, McKinsey Global Institute, May 2016.

37 *Debt and (not much) deleveraging*, McKinsey Global Institute, February 2015.

To explore how differences in productivity growth and labor-market factors such as automation could impact income growth over the next decade to 2025, we conducted three sensitivity analyses. One of these analyses was a "low-growth" case. This assumes that the slow average growth in productivity and employment in the decade from 2002 to 2012, which included the recession and recovery period, will continue throughout the next decade. This assumes annual GDP growth at -0.4 percent for Italy, 0.9 percent for France, and 1.8 percent for the United States. Demographic and labor-market effects follow the same trend as the 2002–12 period. These assumptions are in line with the diagnosis of some economists that the global economy is undergoing a period of "secular stagnation."[38] Under this low-growth hypothesis, an even larger proportion of income segments in advanced economies—from 70 percent to 80 percent—could experience flat or falling real market incomes in the next decade to 2025 than during the 2005–12 period. Governments might need to make targeted transfers as high as 15 to 20 percent of all net transfers made in 2012, on average, to avoid losses of disposable income—a burden that would be difficult for many governments to bear.

70-80%
of income segments could experience flat or falling incomes in the next decade if growth remains low

Our "high-growth" case assumes higher annual GDP growth, of 1.3 percent for Italy, 1.8 percent for France, and 2.4 percent for the United States, with productivity growth in advanced economies reverting to the 30-year average preceding the financial crisis, about 2 percent per year. Unemployment rates would fall as demand accelerates, and we assume that factors such as demographic shifts and technology adoption would continue to affect labor-market dynamics and incomes as they have in the past decade. With this sustained economic upturn, the proportion of household income segments experiencing flat or falling incomes would drop off sharply but not disappear.

Under these conditions, market incomes might be flat or falling in 10 to 20 percent of income segments across advanced economies. While that is considerably lower than the proportion of households affected in 2005–14, it is five to ten times the pre-2005 level.

The relationship between productivity growth and income growth is uncertain, so using similar productivity assumptions as the high-growth hypothesis, we also modeled a variation on the high-growth case as a third hypothesis. For this, we incorporated a greater disruptive impact of technology on employment. This reflects the potential for increasingly powerful digital technologies to take on many activities now requiring workers, further reducing demand for low- and medium-skill workers.[39] To understand the potential range of this sensitivity, we assumed, on the basis of prior MGI research, that advances in technology might automate as much as 15 percent of the work that medium-skill workers do.[40] Unemployment and underemployment would rise, and the wage share would fall further. Some 30 to 40 percent of the population might be in income segments where real market incomes in 2025 are flat or down compared with 2012. To sustain disposable incomes, additional targeted transfers of as much as 5 to 10 percent of 2012 net transfers might be needed.

It should be noted that this labor disruption hypothesis does not fully model the normal behavior of economies. In reality, the wealth and investment created by rising productivity would create new types of demand, which would lead to jobs that do not exist today. This has been the pattern when new technologies have disrupted labor markets in the past: rising output leads to more profits, which enables new investment, leading to new

[38] The secular stagnation hypothesis, which holds that an oversupply of savings and a lack of investment can reduce growth, inflation, and the "natural" equilibrium interest rate, dates back to the 1930s and has gained renewed attention recently. See Lawrence H. Summers, "The age of secular stagnation: What it is and what to do about it," *Foreign Affairs*, March/April 2016.

[39] For a discussion of the potential effect of automation, see Michael Chui, James Manyika, and Mehdi Miremadi, "Four fundamentals of workplace automation," *McKinsey Quarterly*, November 2015.

[40] *Digital America: A tale of the haves and the have-mores*, McKinsey Global Institute, December 2015.

employment and more demand. However, this sensitivity analysis serves to illustrate the extent to which rapid technological changes could affect income inequality for a sustained period if they outpace the rate at which workers and employers adapt to the new realities of the labor market.

WHAT CAN BE DONE TO ADVANCE INCOMES?

Income inequality in general has become a high-profile public issue that challenges both government and business, and the sheer numbers of households affected by flat or falling incomes cannot be ignored. In this final section we identify a set of potential actions that policy makers and business leaders may want to consider as they seek to address the causes, reduce the number of people affected, and mitigate the effects.

The ideas we present here are not designed to be prescriptive or recommendations that all countries could and should adopt. Moreover, the evidence base about the second- and third-order effects of many of these policies is limited and needs further investigation. For government policy makers and business leaders alike, introducing changes that rekindle income advancement is not straightforward and may require some difficult trade-offs. Policies to raise productivity may not help reduce income inequality, for example, while efforts to achieve a more equal income distribution may at times inhibit moves to increase productivity growth. The policy options we outline are primarily aimed at stimulating discussion. They fall into four categories: improving the measurement of flat and falling incomes; ways to rekindle economic growth and broadly support business expansion and job creation; initiatives to provide more opportunities for low- and middle-income households to find work; and policies to secure the income and consumption levels of low- and middle-income households through transfers, tax reforms, labor-market regulations, and compensation practices. We also identify several measures that businesses could undertake by way of their contribution to reducing income inequality.

Creating measurement tools to gauge the extent and evolution of flat or falling incomes

International organizations including the OECD and the International Labour Organisation (ILO) are starting to look at more effective ways to measure income inequality, alongside other standard economic indicators such as unemployment or GDP growth. Income advancement could become a policy goal in its own right, a fundamental indicator of the health of the economy and society, comparable to poverty reduction or sustaining overall employment.

To address the issue of flat or falling incomes effectively, policy makers will need to adopt specific metrics to track the phenomenon across the entire income spectrum. For now, such data are not comprehensive or systematically gathered in most countries, and where statistics are available, they tend to be based on survey data. Measuring flat or falling incomes is an important starting point to provide a fact base, and the metrics could be improved, including through use of more reliable sources such as tax data.

Tracking this data could be part of the formal mandate of international organizations including the OECD or the World Bank so that it can be aggregated and compared across countries. As different policies are deployed around the world, they could be structured in a way that would enable their outcomes to be measured. Tracking and evaluating flat or falling incomes would allow for the development of a set of best practices that could be deployed across countries affected by the phenomenon. Governments could also study the impact of policy measures on the advancement of incomes, for example whether changes in depreciation rates could affect labor-market factors such as the wage share.

Reviving growth and enabling a thriving business environment that creates jobs

As we have seen, the economic downturn was a fundamental cause of the lack of income advancement for a large majority of income segments since 2005. The corollary is that revival of stronger economic growth will be a key to raising incomes, even in the face of demographic shifts and labor-market changes that work against them. Conversely, if the current low-growth world becomes the new "normal," the phenomenon of flat or falling incomes could become entrenched.

The paramount importance of boosting growth through improved productivity is a theme we have covered extensively in 25 years of MGI research.[41] About three-quarters of the potential for productivity improvements comes from the adoption of existing best practices and "catch-up" productivity improvements, while the remaining one-quarter comes from technological, operational, and business innovations that push the frontier of the world's GDP potential. Governments have many opportunities to help boost productivity, including through measures that would reduce waste and improve resource and energy efficiency, increase competition and deregulation, or target infrastructure and other investment that creates new jobs in the short run and shores up economic growth over the longer term.

Developing measures aimed at households most at risk

Beyond such general remedies, the phenomenon of flat or falling incomes could be addressed through measures specifically aimed at low and middle-income households or the population segments we identify as being most at risk, including young people with low educational attainment, women, and older workers.

Upgrading skills and easing the transition from education to employment is one approach. At the secondary school level, public school systems can collaborate with local businesses to craft vocational training and apprenticeship programs, particularly in fast-growing service industries such as health care. Governments and businesses could work with universities and other post-secondary institutions to expand access to quality education and ensure that the education provided is relevant to the workplace of tomorrow. Incentives could be offered for students to pursue fields of study, such as science, technology, engineering, and math subjects, that lead to more lucrative jobs.

To raise labor participation among women and older workers, policy makers could provide greater access to child care, or help women enter or reenter the labor force by removing tax rules that penalize two-income households. Technology could also provide some solutions. For example, digital platforms such as LinkedIn or Monster, which link employers with workers, provide a new way of overcoming a skills mismatch, while companies such as TaskRabbit provide opportunities for individuals to become engaged in independent work. MGI has estimated that online platforms could increase global GDP by 2 percent to 2025.[42] Enforcing anti-discrimination laws would also help raise incomes for women and minority segments. Pension reforms can reduce the proportion of workers who leave the labor force early.

Using tax and welfare policies to secure disposable income growth

Many advanced economies, including the United States, used transfer and tax policies to battle the effects of the recession and its aftermath. Fiscal stresses and mounting government debt can make raising taxes and transfers economically challenging today and in the future. But rather than implementing broad-based redistributive programs, policy makers can use tools targeted at income deciles with flat or falling incomes that are not as costly. For example, even where national income taxes are low, sales

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41 Most recently, *Global growth: Can productivity save the day in an aging world?* McKinsey Global Institute, January 2015.

42 *A labor market that works: Connecting talent with opportunity in the digital age*, McKinsey Global Institute, June 2015.

and value-added taxes, payroll taxes, and property taxes can fall heavily on low- and middle-income households. These taxes could be adjusted to raise disposable incomes for these households. Policy makers can also consider the impact of their spending decisions on disposable incomes of segments whose incomes are not advancing. A public transit system, for example, is likely to provide more value for a lower income household than a new highway.

Where there is political consensus, direct payments such as a guaranteed basic income scheme or expansion of programs such as the US earned income credit could be used to maintain disposable incomes, although such measures can be highly controversial.[43] Also, where appropriate, labor rules could help lift incomes for segments that have not been advancing. This might include adjusting minimum wages or extending employment protections and benefits to part-time and temporary workers, which some countries already have done.

Business leaders have a role

Flat or falling incomes—and the underlying causes—have direct effects on business and raise questions about how businesses can thrive over the long term in advanced economies. The declining purchasing power of the broad middle classes in consumption-driven economies is the most obvious problem. Another arises from one of the most important causes of income stagnation—escalating demand (and cost) for high-skill labor and falling demand for other types of workers. This is creating a potentially serious shortage of qualified high-skill talent across advanced economies and a glut of less-skilled workers.[44]

Both in the United States and internationally, business leaders are being encouraged to think about long-term outcomes for their companies and for all stakeholders, including employees, customers, and their communities—starting with contributing to broad-based prosperity.[45] Business leaders have a legitimate role to play in shaping the discussion on flat or falling incomes and helping to create solutions. CEOs can be advocates for the investment and growth necessary to create employment. They may recognize that paying better wages and introducing profit-sharing and non-cash benefits can raise employee disposable incomes and at the same time raise productivity and loyalty. Companies can also benefit by taking steps to keep women and older workers in the workforce. Finally, companies can invest in a better labor pool—and increase the earning potential of workers—by collaborating with the public sector on job-relevant education. More broadly, companies can act as catalysts in their communities to enact policy changes.

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Widespread income stagnation in advanced economies is a phenomenon that we are just beginning to understand. Without a return to much stronger GDP growth in advanced economies—and potentially even if GDP growth were to accelerate—the trend will likely persist, as a result of deep shifts in demographics and labor markets. Even if there is a substantial uptick in productivity-led growth over the next decade, a minority of households may remain in segments whose income is flat or falling. Not advancing is a development that could have corrosive social and economic consequences, yet it is not a foregone conclusion. Our research suggests that policy can make a difference. The flat or falling trend merits bold measures on the part of government and business alike.

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[43] For example, voters in Switzerland in a June 2016 referendum overwhelmingly rejected the introduction of a guaranteed basic income.

[44] *The world at work: Jobs, pay, and skills for 3.5 billion people*, McKinsey Global Institute, June 2012.

[45] See, for example, Dominic Barton, "Capitalism for the long term," *Harvard Business Review*, March 2011; John Browne, with Robin Nuttall and Tommy Stadlen, *Connect: How companies succeed by engaging radically with society*, PublicAffairs, 2016; Kathleen McLaughlin and Doug McMillon, "Business and society in the coming decades," *McKinsey Quarterly*, April 2015.

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